Docket No.: 1509-275 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

John Richard CLARKE

Serial No. Not Yet Assigned : Group Art Unit: Unknown

Filed: Herewith : Examiner: Unknown

For: DEVICE AND METHOD FOR DATA TIMESTAMPING

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents Washington, D. C. 20231

Sir:

Prior to examination on the merits, please amend the referenced application as follows:

IN THE CLAIMS:

Please amend claims 14-18, 22, 24 and 26 as follows:

- 14. (Amended) A method of storing secure time-stamped data in a data storage device, a trusted clock being at the data storage device, comprising the steps of:
- (i) timestamping data by using the trusted clock at said data storage device;
- (ii) creating a digital signature dependent upon content of said data and time-stamp; and

- (iii) storing said data and the signature associated with said data in said data storage device on a recording medium of said data storage device.
- 15. (Amended) A method as claimed in claim 14 where said data storage device comprises a long-term data storage medium and wherein time-stamped, signed data are stored on said long-term data storage medium.
- 16. (Amended) A method as claimed in claim 14 wherein a controller is used to control operations (i) to (iii), and wherein said controller is controlled by control logic, and protecting said control logic by a trusted mechanism which ensures that said control logic has not been modified from what it should be.
- 17. (Amended) A method as claimed in claim 14 further including checking data received by said data storage device for a flag indicative of instructions to time-stamp all of or a selected part of said data, and said data, or the part of said data, is time stamped accordingly.
- 18. (Amended) A method as claimed in claim 14 further including checking a command language of a controller for instructions to time-stamp all, or a selected part, or parts, of said data.
- 22. (Amended) A method of storing time-stamped data in an arrangement including (a) a data storage device having a long term data storage medium, (b) a trusted clock at said data storage

device; and (c) a controller at said storage device, the controller being associated with control logic that is protected by a trusted mechanism, the method comprising the steps of:

- (i) using the trusted clock to time stamp said data at said data storage device, under the control of said controller;
- (ii) creating a digital signature dependent upon content of said data and time-stamp, under the control of said controller; and
- (iii) storing said data and associated signature on said long term data storage medium of the data storage device, under the control of said controller.
- 24. (Amended) Software, firmware or a computer readable medium having a program recorded thereupon which, in use, causes a processor of a data storage device running a program to execute a process including:
- i) time-stamping data at said data storage device;
- ii) creating a digital signature dependent upon content of said data and time-stamp; and
- iii) storing said data and associated said signature on a recording medium of said data storage device.
- 26. (Amended) A method of storing time-stamper data on a network comprising transmitting the data from a first, remote, network-attached device to a data storage device, the data storage device including a trusted clock, a memory, a time-stamper and a

digital signer, storing in said memory data that have been timestamped by said time-stamper, the stored data including a time obtained from said trusted clock and digitally signed with a digital signature by said digital signer, in the absence of transmitting time-stamped data back to said remote device for storage.

REMARKS

Method claims 14-18, 22, 24 and 26 have been amended to define Applicant's invention in accordance with proper U.S. practice, i.e., by reciting positive, active steps and to eliminate the "providing" steps of claim 14.

Entry is in order.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Date: February 7 , 2002

MARKED UP VERSION SHOWING CHANGES

- 14. (Amended) A method of storing secure time-stamped data in a data storage device, a trusted clock being at the data storage device, comprising the steps of:
 - [(i) providing a data storage device;]
- [(ii) providing a trusted clock at said data storage
 device;]
- [(iii)](i) timestamping data by using the trusted clock at said data storage device;
- [(iv)](ii) creating a digital signature dependent upon content of said data and time-stamp; and
- [(v)](iii) storing said data and the [associated said] signature associated with said data in said data storage device on a recording medium of said data storage device.
- 15. (Amended) A method as claimed in claim 14 where said data storage device comprises a long-term data storage medium and wherein time-stamped, signed data [is] are stored on said long-term data storage medium.
- 16. (Amended) A method as claimed in claim 14 wherein a controller is used to control operations [(iii)] (i) to [(v)] (iii), and wherein said controller is controlled by control logic, and [wherein] protecting said control logic [is protected] by a

trusted mechanism which ensures that said control logic has not been modified from what it should be.

- 17. (Amended) A method as claimed in claim 14 [wherein] further including checking data received by said data storage device [is checked] for a flag indicative of instructions to timestamp all of or a selected part of said data, and said data, or the part of said data, is time stamped accordingly.
- 18. (Amended) A method as claimed in claim 14 [wherein] further including checking a command language of a controller [is checked] for instructions to time-stamp all, or a selected part, or parts, of said data.
- 22. (Amended) A method of storing time-stamped data <u>in an arrangement including (a) a data storage device having a long term data storage medium, (b) a trusted clock at said data storage device; and (c) a controller at said storage device, the controller being associated with control logic that is protected by a trusted mechanism, the method comprising the steps of:</u>
- [(i) providing a data storage device having a long term data storage medium;]
- [(ii) providing a trusted clock at said data storage
 device;]
- [(iii) providing a controller at said storage device, with associated control logic that is protected by a trusted mechanism;]

- [(iv)](i) using the trusted clock to time stamp [time-stamping] said data at said data storage device, under the control of said controller;
- [(v)] (ii) creating a digital signature dependent upon content of said data and time-stamp, under the control of said controller; and
- [(vi)](iii) storing said data and associated signature on said long term data storage medium of the data storage device, under the control of said controller.
- 24. (Amended) Software, firmware or a computer readable medium having a program recorded thereupon which, in use, causes a processor of a data storage device running a program to execute a process <u>including</u>[comprising the steps of]:
- i) time-stamping data at said data storage device;
- ii) creating a digital signature dependent upon content of said data and time-stamp; and
- iii) storing said data and associated said signature on a recording medium of said data storage device.
- 26. (Amended) A method of storing time-stamper data on a network comprising transmitting the data from a first, remote, network-attached device to a data storage device, the data storage device including a trusted clock, a memory, a time-stamper and a digital signer, [the device being adapted, in use, to store] storing in said memory data that [has] have been time-stamped by

Serial No. S/N

said time-stamper, the stored data including [with] a time obtained from said trusted clock and digitally signed with a digital signature by said digital signer, in the absence of transmitting time-stamped data back to said remote device for storage.